CLAIMS

What is claimed is:

1. A fuel composition, comprising:

(a) at least 90% by weight of a hydrocarbon-based fuel;

(b) 0.5% to 9% by weight dry ethanol; and

(c) 0.1% to 5% by weight of an additive reaction product formed from the reaction of di- or trialkanolamines with vegetable oils or with alkyl esters of the fatty acid mixtures from vegetable oils, wherein the composition is free from alkoxylated compounds.

2. The fuel composition according to Claim 1, wherein component (a) comprises diesel oil.

3. The fuel composition according to Claim 1, wherein the vegetable oils comprise fatty acid esters with mono- or polyunsaturated C_{11-21} alkyl groups.

4. The fuel composition according to Claim 1, wherein the vegetable oils are selected from the group consisting of: soybean oil, rapeseed oil, sunflower oil, peanut oil, linseed oil, olive oil, castor oil, palm oil, thistle oil, and mixtures thereof.

5. The fuel composition according to Claim 1, wherein the alkyl esters are ethyl and/or methyl esters.

6. The fuel composition according to Claim 1, wherein the di- or trialkanolamines include C_{1-4} alkanol groups, wherein the alkanol groups independently of one another have the same number or different numbers of carbon atoms.

7. The fuel composition according to Claim 2, wherein the diesel oil includes biodiesel.

8. The fuel composition according to Claim 1, wherein the reaction is continued until the reaction product is clear and dissolves clearly in diesel in the form of a 1% mixture at -10°C to -20°C.

9. The fuel composition according to Claim 1, wherein the reaction product is subjected solely to filtration.

10. The fuel composition according to Claim 1, wherein the ratio by volume (v/v) of diesel oil to additive is in the range from 1000:0.5 to 1000:50.

11. The fuel composition according to Claim 1, wherein the ratio by volume (v/v) of diesel oil to additive is in the range from 1000:1 to 1000:50.

12. A fuel composition consisting of:

(a) 90% to 98% by weight diesel oil;

(b) 1% to 8% by weight dry ethanol; and

(c) 0.1% to 1.5% by weight of an additive reaction product formed from the reaction of di- or trialkanolamines with vegetable oils or with alkyl esters of the fatty acid mixtures from vegetable oils, wherein the composition is free from alkoxylated compounds.

13. The fuel composition according to Claim 12, wherein component (c) is present in an amount of 0.5% to 1.0% by weight.

14. A process for the production of diesel oil/ethanol mixtures comprising the step of:

adding an additive reaction product formed from the reaction of di- or trialkanolamines with vegetable oils or with alkyl esters of the fatty acid mixtures from vegetable oils in quantities of at most 0.1% to 5.0% by weight to dry ethanol to form a mixture; and

adding the mixture to diesel oil.

15. The process according to Claim 14, wherein prior to the step of adding the additive reaction product to dry ethanol, diesel oil is combined with dry ethanol and the step of adding the mixture to diesel oil is omitted.

16. A solubilizer for ethanol-containing diesel fuel, comprising a reaction product from the reaction of di- or trialkanolamines with vegetable oils or with alkyl esters of the fatty acid mixtures from vegetable oils.